雅麗氏何妙齡那打素醫院
Alice Ho Miu Ling Nethersole Hospital
caring since 1887

Miss Flora Tai
Clerk to Select Committee
Legislative Council
Government of the Hong Kong Special Administrative Region

Fax: 22482011

27 Jan 2004

Dear Miss Tai,

Re: **Select Committee to inquire into the handling of the Severe Acute Respiratory Syndrome outbreak by the Government and the Hospital Authority**

Thank you for your letter dated 14 Jan 2004.

I would like to submit herewith:

1. Written statement on the specified areas of study,
2. My response to the questions set out in Appendix IV, and
3. My professional qualifications and experience

Thank you for your attention.

Yours sincerely,

Dr Chan Hok Sum

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My response to the following areas of study are as follows:

(i) The infection control measures in Alice Ho Miu Ling Nethersole Hospital (AHNH) around the SARS outbreak period include:

(1) Promulgate and implement infection control guidelines – HA surveillance of severe community acquired pneumonia and guidelines for infection control measures for droplet infection, a series of frequently asked questions in the management of severe community acquired pneumonia and influenza-like illness, the guidelines for infection control procedures issued by HAHO and NTEC were released to frontline workers by e-mail, circulars and highlighted during hospital and departmental meetings and were available at the intranet.

(2) Provision of personal protection equipment (PPE) and infection control training – since PWH Ward 8A outbreak, all staff in medical wards were required to wear masks in ward areas and N95 masks and gowns were available when handling body fluids, secretion and when nursing patients in isolation rooms. For infection control training, educational talk on influenza infection and droplet precaution was given by ICN to the infection control link nurse. A series of infection control training program was arranged for all staff and specific groups in the form of workshop, demonstration, briefing, teleconference etc. Surgical masks were also provided to patients from mid March 2003.

(3) Environment enhancement – from early March 2003, the ventilation of the wards were improved with increased fresh air supply, air change and air filters were changed. Exhaust fans and partition walls were installed. Increased cleansing was provided to ward areas.

(4) Triage of patients – at A&E department (AED), A&E senior medical officers were responsible for case triage and segregation. Patients with suspected SARS were admitted to PMH/PWH. Patients not fitting diagnostic criteria of SARS but required hospital admission were admitted to AHNH, or to other hospitals. In the medical wards, patients with respiratory symptoms (not suspected SARS cases) were admitted to designated wards. All medical patients were screened by senior doctors at least 2 times per day, and respiratory physicians were called immediately for cases suspected of SARS. Transfer to PMH/PWH was arranged when indicated.

(5) Control spread of infection – when there was a SARS outbreak in a ward, the patients in the ward would be cohorted and no admission or discharge from the ward was allowed. The list of discharged patients and visitors to the ward was prepared and faxed to DH for contact tracing. Visitors were restricted to all wards in April 03.

(6) Surveillance of staff and patients – daily flu surveillance among staff and increased quota for staff clinic were arranged. Staffs were advised to look out for respiratory symptoms and fever and attend staff clinic or AED if necessary. Medical staffs were reminded to look out for development of fever among the patients and to take chest X ray, blood tests and consult respiratory physician as necessary.

(7) Supporting services – increased frequency of cleansing of wards and environment, changing areas and additional temporary quarters for staff.

(ii) Closing and reopening of Ward E1 of AHNH

On 25.3.03, the first Health Care Worker (HCW) who was the nursing staff in Ward E1 developed fever. He was granted sick leave until 28.3.03. On 28.3.03, he attended AED of AHNH. He complained of fever and malaise but had no other symptoms or signs. His lymphocyte count (1.3 x10^9/L) was normal. He was suspected to have SARS and was transferred to PMH for further observation and management.

On 31.3.03, 3 nurses got fever on the same day and were admitted to PMH. The ward was closed. Infection control measures in ward E1 and other wards were upgraded. The outbreak was reported to the Department of Health on 31.3.03.

For the patients remaining in E1 ward, they were closely examined for fever and other respiratory symptoms and signs. Chest X ray and blood tests were performed as needed. The management of NTEC, TPH and AHNH discussed the situation and it was agreed that the patients remaining in E1 ward could be cohorted in TPH so that E1 ward could be cleansed thoroughly and reopened as an infection triage ward. On 3.4.03, the 14 remaining patients in E1 were transferred to TPH for convalescence and continued quarantine; E1 ward was vacated for terminal cleansing. It was reopened as an infection triage ward on 7.4.03.

Appendix IV

My response to the questions are as follows:

1. The index patient of E1 ward was admitted to AHNH on 21.3.03 for fever and chest X ray initially showed only left mid zone haziness. His lymphocyte count was normal (1.2x10^9/L). No source of SARS contact could be found after detailed questioning. He had no travel history to China. The patient was assessed by a respiratory physician and the specialist's opinion was that he was suffering from bacterial community acquired pneumonia. Antibiotic treatment was started. The patient was asked to put on surgical mask on admission. It was noticed that

the patient sometimes did not wear mask or did not do so properly because he felt uncomfortable with the mask. He agreed to wear the mask after explanation and persuasion were given by the nursing staff.

2. The wearing of mask was not compulsory. For patients who did not wear masks because of feeling uncomfortable, we would explain to the patient the importance of wearing masks and persuade them to do so. For elderly patients with dementia or confused for other reasons, the nursing staff would put on the mask for the patients. We have no right to force the patient to wear mask if they insisted not to wear it, but we found that patients would generally accept our advice.

3. The 5 HCWs who contracted SARS afterwards had history of caring the index patient. A doctor and a nursing officer having cared for this patient did not get SARS probably because of less exposure. All the 5 HCWs were wearing surgical mask and practiced hand washing after caring for patients during that period. They were also wearing N95 masks and gown during procedures likely to generate splashes of blood or body fluids.

4. E1 ward was closed to admission and discharge on 31.3.03 because 3 HCWs developed fever and chest X ray abnormality on that day. The closing of E1 ward was initiated by me and endorsed by HCE of AHNH. Before 31.3.03, there was a suspected staff on 28.3.03. Infection control measures were upgraded after the suspected case. There was no requirement to close ward in E1 in the circumstances. Also, closing of the ward at that time was not indicated.

5. E1 ward was reopened as a SARS triage ward on 7.4.03. SARS triage ward was required for screening patients who did not have full blown features of SARS on admission, and at that time E1 was available for that purpose. The precautionary measures taken in E1 ward included upgrading the infection control measures, training for staff, decreasing the number of beds, installation of exhaust fans, installation of partition walls and increased frequency of cleansing of ward area.

6. I know that 3 contract workers of AHNH were infected with SARS. All 3 contract workers worked in ward E1. I do not know how they got infected. Two of the contract workers had attended infection training given by AHNH's ICN. The other received training by the manager of the contractor who in turn had received training from ICN. The 3 workers complied with the infection control measures while working in ward E1. The infection control training given to the

contract workers was the same as that given to AHNH's staff.